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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/724,787	12/01/2003	Gianluca Paladini	2002P19673 US01	1913
7590 Siemens Corporation Intellectual Property Department 170 Wood Avenue South Iselin, NJ 08830				
EXAMINER				
RICHER, AARON M				
ART UNIT		PAPER NUMBER		
2628				
MAIL DATE		DELIVERY MODE		
11/17/2010		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

**Advisory Action
Before the Filing of an Appeal Brief**

Application No.

10/724,787

Applicant(s)

PALADINI, GIANLUCA

Examiner

AARON M. RICHER

Art Unit

2628

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 03 November 2010 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☐ The period for reply expires _____ months from the mailing date of the final rejection.
b) ☒ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.
Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
(a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);
(b) ☐ They raise the issue of new matter (see NOTE below);
(c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: _____. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
5. ☐ Applicant's reply has overcome the following rejection(s): _____.
6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
7. ☐ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
The status of the claim(s) is (or will be) as follows:
Claim(s) allowed: _____.
Claim(s) objected to: _____.
Claim(s) rejected: _____.
Claim(s) withdrawn from consideration: _____.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:
See Continuation Sheet.
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08) Paper No(s). _____
13. ☐ Other: _____.

/Aaron M Richer/
Primary Examiner, Art Unit 2628

Continuation of 11, does NOT place the application in condition for allowance because: Examiner notes that this action responds to the newly presented, italicized remarks in after-final response filed November 3, 2010. Examiner has previously responded to the previously presented non-italicized remarks in Final Rejection mailed out on September 3, 2010.

Applicant argues that the context of Smith discusses identification and viewing of planes or slices and not 3D rays cast through the volume. Applicant argues that the cited portion of Smith is discussing 3D linear rays that are not rendering rays, and that the term "scan conversion" typically indicates polar-to-Cartesian conversion in imaging a 2D plane. Examiner notes that the rendering in Smith does produce a 2D image, as any rendering would. However, the rays being traced are 3D rays and the fact that they are traced to produce a raster line makes it clear that the rendering is based on these traces. Examiner agrees that Smith is concerned with rendering slices, but notes that the slices make up a volume of slices of the 3D dataset, and are produced by tracing the 3D linear rays.

Inventor argues that Smith describes an approach opposite of the instant invention, because it scan converts all data upfront. Inventor notes that the process in Smith continues until all lines have been scan converted. However, Smith states that all "lines" are converted- this does not mean that the entire volume is scan converted, just the part that corresponds to the scanlines of the display, the viewable portion of the volume.

Applicant further argues that Smith does not disclose a virtual volume free of voxels, because actual data is used. However, as noted in the Final Rejection, the actual data is stored in polar format, thus making the Cartesian volume a "virtual volume free of voxels".

Applicant further argues that Smith's reference to rendering in col. 26 is confusing because there are no other descriptions of 3D representations or 3D rendering in Smith, and states that this may be a copy-and-paste error in the reference. Examiner notes the arguments above as showing how Smith does describe rendering a 3D representation for display on a 2D device. Applicant argues that col. 26 is a different mode of operation than that shown in col. 20. Examiner cannot find evidence of these two columns describing different modes or embodiments. Rather, they appear to show different parts of the same method that results in converting a 3D volume in polar coordinates to a 2D screen in Cartesian coordinates.

Applicant further argues that alpha blending is not a simple averaging of a group of points equally distributed in a 3D space. However, as explained on p. 3 of the Final Rejection, col. 20, lines 1-20 of Smith discloses blending using interpolation between 2 or 4 values with each value have a specific coefficient associated with it. This is exactly what makes up an alpha blending operation: a number of values have specific coefficients (alpha values representing an opaqueness) associated with them that are then used in an interpolation operation.